

REMARKS

Claims 1 and 2 have been amended. Claims 3-5, 13-23 and 25 have been canceled. No new matter has been added. Thus, claims 1, 2, 6-12, 24 and 26 - 29 remain pending in the present application. In view of the following remarks, it is respectfully submitted that all of the presently pending claims are allowable.

Claims 1, 2, 5-11, 24, and 26 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,980,514 to Kupiecki et al. (hereinafter "Kupeicki") in view of U.S. Patent No. 5,382,260 to Dormandy, Jr. et al. (hereinafter "Dormandy").

Amended claim 1 recites an embolic coil comprising "an elongated core element formed of a shape memory material and movable between a straightened first configuration and a shape memorized second coiled configuration; an elongated outer element which, in the first configuration, is wound around the elongated core element to form a primary coil; and a plurality of fibers frictionally gripped between adjacent coils of the primary coil."

It is respectfully submitted that neither Kupiecki nor Dormandy teach or suggest a device "an elongated outer element which, in the first configuration, is wound around the elongated core element to form a primary coil; and a plurality of fibers frictionally gripped between adjacent coils of the primary coil," as recited in claim 1. The Examiner correctly states that Kupiecki does not teach or suggest any fibers at all and cites Dormandy in support of the rejection. (*See* 9/11/09 Office Action, p. 3). However, it is respectfully submitted that Dormandy does not teach "a plurality of fibers frictionally gripped between adjacent coils of the primary coil," as recited in claim 1 but rather, is directed to fibers 22 that are wound around turns of the coil and held in place by a loop 23 formed by the winding. (*See* Dormandy, col. 3, ll. 50 - 60). Specifically, Dormandy explicitly states that the "loop 23 serves as the sole means for retaining the group 21 of fibers 22 on the coil 12." (*Id.*). It is therefore respectfully submitted the fibers 22 of Dormandy are not frictionally gripped between adjacent coils of the coil 12, especially in light of

the fact that adjacent turns of the coil 12 are shown to be spaced from one another. Specifically, Dormandy does not teach or suggest that adjacent turns of the coil 12 are wound tightly against one another. Rather, Figs. 3 and 4 of Dormandy clearly depict the adjacent turns are spaced from one another. It is therefore respectfully submitted that Dormandy fails to teach or suggest “a plurality of fibers frictionally gripped between adjacent coils of the primary coil,” as recited in claim 1.

Still further, it is respectfully submitted that the modification proposed by the Examiner provides unexpected results. Specifically, Dormandy teaches fibers 22 that are wound around turns of the coil 12 to form a loop 23. (*Id.*). The loop 23 is formed by inserting a first free end of the fiber 22 between two turns of a coil and into a cavity located within the coil 12 and the free end is then looped around a turn of the coil and inserted back into the cavity before being drawn out of the coil 12 one last time. (*Id.*, *See Also* Figs. 3 - 4). It is unclear how the Examiner’s proposed modification – i.e., incorporating the fibers 22 of Dormandy into the device of Kupiecki – would result in the claimed invention as the fibers 22 cannot be looped around the wire 202 due to obstruction by the inner core member 204. (*See* Kupiecki, col. 14, ll. 3 - 45; Fig. 8). Specifically, to achieve the desired helical shape, the wire 202 of Kupiecki must be wound in a tight configuration over the inner core member 204 as a loose winding is incapable of imparting the desired coiled shape. Kupiecki states that the wire 202 is secured to the outer body of the inner core member 204 by welding the contacting ends thereof together, thus confirming that the wire 202 is wound tightly over the inner core member 204 so that the resulting coil is held in a contacting configuration therewith. (*Id.* at col. 14, ll. 26 - 32). Thus, it is respectfully submitted that modification proposed by the Examiner would not result in the claimed invention and therefore, that the cited references fail to teach or suggest the limitations recited in claim 1.

It is therefore respectfully submitted that neither Kupiecki nor Dormandy, taken either alone or in combination, disclose or suggest an embolic coil comprising “*an elongated outer element which, in the first configuration, is wound around the elongated core element to form a primary coil; and a plurality of fibers frictionally gripped between adjacent coils of the primary*

coil,” as recited in claim 1. Accordingly, it is respectfully submitted that claim 1 is allowable. Because claims 2 and 6 - 11 depend from and, therefore, include all the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

Claim 24 recites limitations substantially similar to claim 1, including “a *primary coil having a primary coil shape, the primary coil defining a lumen extending therethrough; a secondary coil formed of a shape memory material and disposed in the lumen, the secondary coil having a secondary coil memorized shape, wherein, when heated to a temperature above a critical temperature of the shape memory material, the secondary coil causes the primary coil to follow the secondary coil shape; and a plurality of fibers gripped between adjacent coils of the primary coil and held therebetween by friction.*” Thus, it is respectfully submitted that claim 24 is also allowable for at least the same reasons stated above with reference to claim 1. Because claim 26 depends from and, therefore, includes all the limitations of claim 24, it is respectfully submitted that claim 26 is also be allowable.

Claims 5, 11, 12 and 27 - 29 stand rejected under 35 U.S.C. 103(a) as unpatentable over Kupiecki in view of U.S. Patent No. 6,171,326 to Ferrera et al. (hereinafter “Ferrera”).

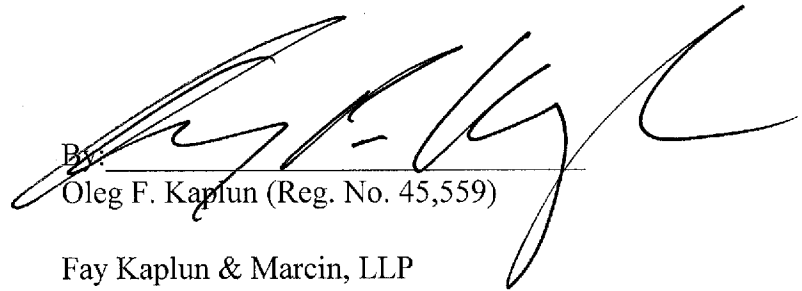
The Examiner correctly stated that Kupeicki does not show or suggest a coil having fibers, as recited in claim 1. (See 9/11/09 Office Action, p. 3). It is further submitted that Ferrera also does not disclose nor suggest a coil having “an elongated outer element wound around the elongated core element in the first configuration to form a primary coil; and a plurality of fibers frictionally gripped between adjacent coils of the primary coil,” as recited in claim 1. Thus, it is therefore respectfully submitted that neither Kupiecki nor Ferrera, either alone or in combination, disclose nor suggest an embolic coil comprising “an elongated outer element wound around the elongated core element in the first configuration to form a primary coil; and a plurality of fibers frictionally gripped between adjacent coils of the primary coil,” as recited in claim 1. Because claims 11 and 12 depend from and, therefore, include all the limitations of claim 1, it is respectfully submitted that these claims are allowable.

Similarly, neither Kupiecki nor Ferrera, either alone or in combination, disclose nor suggest an embolic coil comprising “a *plurality of fibers gripped between adjacent coils of the primary coil and held therebetween by friction*,” as recited in claim 24. Because claims 27 - 29 depend from and, therefore, include all the limitations of claim 24, it is respectfully submitted that these claims are allowable

In view of the remarks submitted above, the Applicant respectfully submits that the present case is in condition for allowance. All issues raised by the Examiner have been addressed, and a favorable action on the merits is thus earnestly requested.

Respectfully submitted,

Dated: November 16, 2009


By: _____
Oleg F. Kaplun (Reg. No. 45,559)

Fay Kaplun & Marcin, LLP
150 Broadway, Suite 702
New York, New York 10038
Tel: (212) 619-6000
Fax: (212) 619-0276